App. F IX—4 | 18 | File No. [illegible]

Previous References. | ( ) | Serial Nos.

Later References.

THE MYSORE GOVERNMENT SECRETARIAT

Irrigation

Serial Nos.

PUBLIC WORKS DEPARTMENT
(MAJOR IRRIGATION)
Mysore Government Secretariat,
Vidhana Soudha, Bangalore.

27/3/57
15/6/61

Part B for

SUBJECT

Investigation of a Dam across the River Varda -

FOR/NOT FOR NOTE BOOK

4/9/61

By Secretary to Govt.

WD P09293—GPB—2,00,000—1-5-61

FOR/NOT FOR NOTE BOOK

Ashakuntala 25/7/61

PUBLIC WORKS DEPARTMENT
(MAJOR IRRIGATION)
Mysore Government Secretariat,
Vidhana Soudha, Bangalore.

1/9/61

(17) 1/5

G. P. K.—J H 3 -50,000 -5.54
G. S. G. D No. 2109, dated 22-6-22.]

Correspondence

Sectt 78 A e

DOCKET SHEET (B)

Subject:— Investigation of a dam across Vaigai River - Request - for - Sri C. Sundaram, M.L.A.

File No. 595

P. W. D. DEPT.

BRANCH.

References:—

Date.	To whom sent.	Notes instructions,
		1452 29.1.57

595/3266

P-W.D.

Submitted with a draft for approval.

25-3-56.

GS IV

25/3

27/3/56

P.W.D.

J.Br.

p.7 c/s Resubmitted with a draft express letter put up for approval.

30/5/56.

Rypdt.

S95/86th83

P.W.D.

JBr.

Shri Sindhur M.L.A. has requested Govt to consider the possibility of a dam across the river ~~at~~ Varda near Banwasi in ~~this~~ Taluka of Karwar Dist. A report in this connection has now been send from the S.E, K.D.C. and will be found at pp 1 to 6 c/s.

2. A scheme estimated to cost Rs. 12 crores envisaging construction of a dam about 76' high at Kadasura in Shimoga ~~taluka~~ District of the Present Mysore State to impound 20,000 Mcft of water and construction of two canals of 110 and 150 miles each, bringing under command an area of 1.46 lakhs of land in Mysore & B'ore State was considered in the past. But as the submergence was too large i.e. about 57.1 of the land expected to be irrigated and as the scheme would give poor financial return it was not considered attractive enough to enter into protracted negotiations with the Govt of Mysore and as such the scheme was ordered to be dropped under G.O. No. S95/ [illegible]

595 | 1E 228 *B(11) of the HS&PG.

The S.E has now suggested that in view of the impending reorganisation of the States and unification of the Karnatak territories it would be easier for the future Govt. of larger Mysore to deal with the scheme. The S.E. therefore proposes to keep the scheme pending till the reorganisation of states is completed and the New Mysore State is in a position to reconsider the matter.

In view of the position explained above the applicant may if advised see fit to withdraw the petition as per draft put up for approval.

No. ES(9)11

ES&SC

27/8/15

3/10

C.E.(9) & J.S.

5

"Dam across River Varda near Banawasi, in Sirsi Tq, N. Canara Dist

This case relates to the investigation of a Dam across River Varda near Banawasi, in Sirsi Taluka of North Canara Dist. In this connection the S.E. KIC's letter No DI2 dt 4/8/56 at P 11c/i may pl. be perused. In view of para 5 thereon, the S.E. KIC, may perhaps be requested to submit a further report in the matter through the CE MIN.

12/2/57 20/2/57

The letter of the SE KIC at page 11 c/f (duly withdrawn) may now be forwarded to the CE MIN and in view the matter may be called for.

Yes
21/2/57

Dy Secy (Plg)

Resubmitted with a draft for approval.

22/2/57 22/2/57

Issue
23/4/57

Issued No PWD37 GR957 dated 1st March 57
to - The chief Engineer Major Irrigation (North)
Nuzvidu

Submitted with a draft and
fair reminder for approval.

M. issue
MCL
22/5/58

Issued
HW 23/5

Letter No 2046-47 Ts dt 31-5-58 from XP 19 C/R
the CE TE(N).

Further report from the
CE may be awaited.

MCL
6/6/58

6/6/58

Submitted for perusal.

Further report from CE may be awaited. As the investigations are likely to take considerable time, CE may be reminded after about 3-4 months i.e. in the first Week of March 1959.

17/11/58

MCL
17/11/58

The Surveys are stated to have already been taken up. May be reminded by end of Jany-59.

18/11/58

Draft and fair Revised to
CE(W) for Issue
[illegible] 10/3/59

[illegible] Issue
mcl 10/3/59

Issued
GR 11/3

[illegible]

[illegible]

(1) Further work [illegible] from the
CE may be awaited.

VO3
22/[illegible]
mcl 22/4/59

. Stuart.
CP
23/4/59

[illegible]

(2)

[illegible]

11 Submitted for [illegible]
The Plans and Estimate of the Project
may be awaited. The Scheme
is proposed for inclusion in the
[illegible] F-Y. Plan.

The CE will be reminded once
more in a month to know the [illegible].

23/[illegible] mcl 23/4/59 [illegible] PTO

Art –

12) The Varada scheme does not seem to be included in the III Five year plan. Please verify this from the O-S D. If it is not, there seems to be no particular hurry in urging for a detailed scheme. put up again after Consultation

CE
24/9/59.

13 This may please be referred to O.S.D with the reference to para 12 above

CE
24/10.

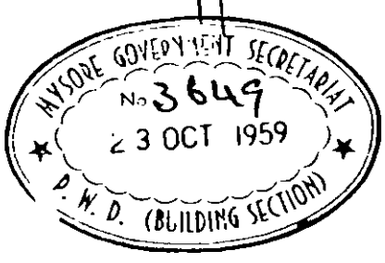
CAR
24/10 (Art 21) 10.

O-S D)

14) Varada scheme, as a flood Control scheme has already been suggested for being investigated. During the discussions in the Madras Dept. Board on 20/10/59, there was considerable mere for inclusion of this in the III F.Y. Plan, as one of the Madras schemes for Irrigation At least a preliminary report may be obtained, as I understand that the project has been investigated sometime back.

El/S Dept)

22/10/59.



15) Please address CE afresh

CE
26/10/59

16) Ref para 15 above – Advice is sent up for appn

CAR
26/10 (Art 26) 10

17) Done
CE
26/10

– entered in No. P.W. 37 IRIS)
dt 12/11/59.

Sno A

CAR
11/11

Investigations of a Dam across the River Varada – Reports from Sri Sindhuvalli MHB

Mysore Government Secretariat | File No. Plan 371 RI 57 of 195 | [App. F. III 2

Serial No.

Received letter no. M.I.I dt 20.11.59 from the Sri. Dharwar

18) Ref paras 12-16 ante – the Sri. has forwarded a brief note on the Preliminary investigations carried out by an Irrigation Unit across Varada River. Detailed investigations are later esp by the Exe. Engr. Dharwar and all efforts are being made to complete the same. The estimate proposed to be sent to Govt for sanction after a complete investigation of the Project, will be awaited

CKL 2/12 7/12/59

Yes 7/12

Received letter no. W/325/57/1054/TA3 dt Dec 5-60 from the CE of Mines.

The Chief Minister desires the Sri to request to complete the detailed investigations immediately and submit the plans & estimates and a report will be made to Govt towards their decision and action on this receipt.

File No. P.W.D. 37 I R I 57 of 195

Mysore Government Secretariat

Serial No.

his be filed if approved

CKS 18/6

Yes 14/6

Bus B. To be put up on 25/7/60. 27/6/60

Despatched in No. P.W.D.37..IRI.57
Dated..... 8th July 60.....

A draft reminder is put up for sign

10/10/60.

Issued 5/10/60

Despatched in No. P.W.D.37..IRI.57
Dated..... 7th October 60

Another reminder is putup for sign

This is under investigation.

14/6

This file may be closed as a 'B' record.

15/6/61.

15/6.

File /Dy.No. PWD 37 IRI 57 Sus No. 9

Date of issue. 1.3.57

Subject in brief. Investigation of a dam across R. river Vardha
request from Shri Sindhuroor M.L.A.

Order	Reminder No.	Date	Remarks.

Submitted with a draft and fair
reminder to C.E. M & N. for approval.
Recommended
27/5/58

29/8/58
Dft and fair D.O. to CE I/P for issue.
Recommended
Issued
30/8

22/6
23/6/59

Despatched In No. P.W.D. 37 I RI 57
Dated 26/6/59

Draft and fair D.O. reminder is put up.
Please see put up
Despatched In No. P.W.D. 37 I.R.I.57
Dated 30/9/59

26/9 (30)a
Put up for perusal
30/9 (30)9
please see remarks in the note file

File/Dy.No.PWD 37 IRI 57 Sus No. 9 IRI

Date of issue 13-57.

Subject in brief:- Investigation & Dam across Sri Varada Request from Sri Shivalingappa M.L.A.

ORDER

REMINDERS ISSUED

No. Date

Draft Ltr. Reminder is put up

Hm 11/5

Despatched in No. P.W.D. 37 (RI 57)

Dated..... 16/5/60

Draft Reminder is put up for appl

Hm 30/7.

G.P.K.—J.H.3.—50,000—5.54
G.I.G. D No. 2108, dated 22-6-22.]

Correspondence

Sectt 78 A e

DOCKET SHEET (B)

Subject:—

File No. 595

P. W.

DEPT.

9

BRANCH.

References:—

Date.	To whom sent.	Notes instructions,

Recd. on 17-3-56

Ackd. on

Noted on to

of

1232

From:

Shri.S.C.Sindhur,M.L.A.
Hangal District:-Dharwar.

B O M B A Y.
12th March 1956.

To

The Honourable the Minister for Public Works
Government of Bombay, Sachivalaya,
B O M B A Y.

Subject:- Investigation of a Dam accross the river Varda near Banwasi in Sirsi Taluka District Karwar.

Sir,

I wish to bring to your notice the following facts to your consideration. The river Varda which is originated at Sagar in Shivmagaa District of Mysore State is flowing through Hangal Taluka of Dharwar District. I have heard a Dam to this river is feasible at about 8 to 10 miles up-stream from Banwasi in Sirsi Taluka. If it is banded here it irrigates thousands of acres in Hangal Taluka and Byadagi Peta and Hirekerur Taluka and Sorba Taluka of Shimoga District of Mysore State. I request you for an immedite inquiry in this matter.

C. E. (I)

17/3/56

Yours faithfully,

Sindhur S.C.

(Sindhur S.C.)
M.L.A.

3 P.W.D.

No 595/32667-J. Sachivalaya Bry
3-4 ~~March~~ 1952.

To Shri S. C. Sindhur M.L.A.
Council Hall, Bry.

Sub: Investigation of Dam across the river Varda near Banwasi in Sirsi Taluka of Karwar Dist

Sir,

I am directed to refer to your letter dt. the 12-3-52 on the subject mentioned above ~~to state that~~ addressed to the M.(P.W.D.) and to state that the matter is receiving attention.

D.A.Nil

Yours faithfully,
(A.S. Dhar)

Copy with a copy of the letter referred to forwarded to the S.E. K.G. for remarks.

5

No. S 95/32667 J. Public Works Depa.
Sachivalaya,
Bombay No.1. 3rd April 1956.

From

The Assistant Secretary to the Government of Bombay,
Public Works Department.

To

Shri S.C. Sindhur, M.L.A.,
Council Hall, Bombay.

Subject:- Investigation of Dam across the river Varda near Banwasi in Sirsi Taluka of Karwar District.

...

Sirx,

I am directed to refer to your letter dated the 12th ~~May~~ March 1956 on the subject mentioned above addressed to Minister (Public Works Department), and to state that the matter is receiving attention.

Yours faithfully,

Assistant Secretary to the Government of Bombay,
Public Works Department.

D.A.Nil.

Copy with a copy of the letter referred to forwarded to the Superintending Engineer, Karnatak Irrigation Circle for remarks.

ttsv:
3/4/56.

5/4

ISSUED
Date 4/4 with case

7

EXPRESS LETTER.

FROM

BOM. WORKS. BOMBAY;

To

~~THE EXECUTIVE ENGINEER,~~

THE SUPERINTENDING ENGINEER, K.I.C. Dharwar

No. S-95/32667-J.

PUBLIC WORKS DEPARTMENT,
~~Bombay Castle~~ Sachivalaya, Bombay No. 1

27th ~~May~~ July 1956.

Subject.— Investigation of Dam across the river Varda near Banwasi in Sirsi-taluka of Kanara Distt.

Please submit very urgently the information called for in Government Endorsement ~~Letter~~ No. ..... of even No. of the 3-4-1956.

Superindentent,
Public Works Department, Secretariat

Copy forwarded to ~~the Superintending Engineer~~ / the Executive Engineer for information.

Date 28/7

A (J) H 349

11

No.DI 2 Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, -

4 AUG 1956

To

The Chief Engineer (Irrigation)
and Joint Secretary to Government,
Public Works Department, Bombay-1.

Subject :- Investigation of a Dam across River Varada Near Banawasi, in Sirsi Taluka of North Kanara District.

Reference :- Government Endorsement below No. S-95/32667 J, dated 3rd April 1956 in reply to letter dated 12th March 1956 from Shri. S.C. Sindhur, M.L.A.

2. With reference to the possibility of taking up an irrigation scheme by harnessing the water resources of Varada River, I have to report as under.

3. The scheme has been investigated on topo-sheet study and a Preliminary report has already been submitted to Government under Superintending Engineer, Special Investigation Circle letter No. D.I. (2)/ 13th / 14th March 1949.

From the report, it can be seen that the scheme estimated to cost about 12 Crores, envisages the construction of a dam, about 76 ft. high, at Kadasuru in Shimoga District (Mysore State) across Varada River to impound 20,000 M.cft. of water and the construction of two canals, right bank and left bank, of length about 140 miles and 150 miles respectively, thus bringing under command about 1.46 Lakh acres of land in Mysore and Bombay States. This helps supplementing the crop requirements (mostly rice is grown) during the months of September and October.

The flat bed fall of the river causes a submergence of nearly 37,000 acres of land under the lake (about 37 % of the land it is intended to irrigate) and for the same reason, the command is restricted to a narrow strip along the fringes of the river, thus making the canals unnecessarily lengthy.

The dam site is situated within the territorial limits of the present state of Mysore and the Canals also traverse a part of their length in the Mysore territory before entering Bombay State. As such, consent and cooperation of the Government of Mysore is essential in principle, even to conduct Preliminary Surveys. The matter, therefore, requires to be taken up at Governmental level for negotiation.

4. Hence Government felt that it would be unwise to fritter energy on such schemes with poor financial return and ordered dropping the scheme under G.L.& P.W.D. No. S-95/18228-I.B.(II), dated 14th May 1949, as it would also entail difficulty in protracted negotiations with the Government of Mysore. Hence the scheme was not persued further.

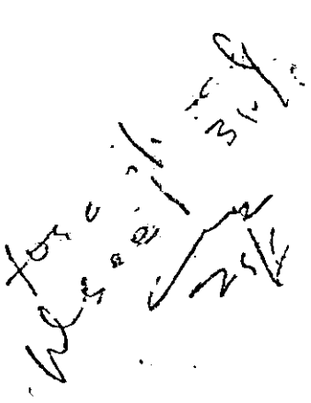
5. In view of the impending reorganisation of States and the unification of Karnatak territories, it would be easier for the future Government of Larger Mysore to deal with the scheme. It is therefore proposed to be kept pending till the reorganisation of States is completed and the new Mysore State is in a position to reconsider the matter.

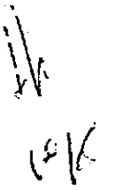
6. A Blue print map showing the details of the scheme is attached herewith for reference.

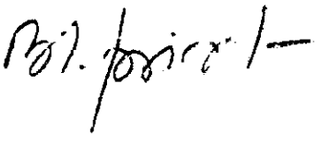
D.A. :-
Blue print map.

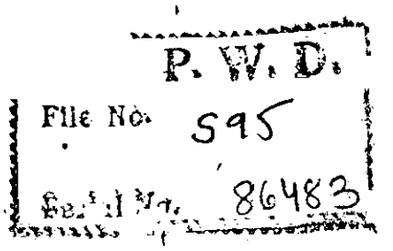
for Superintending Engineer, K.I.C.

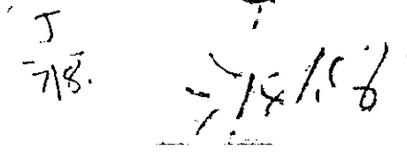
O. C. Appeared
3X S. E.
---- Dy. 3.8.56








P. W. D.
File No. 595
Serial No. 86483



13 P.W.D.,

No. 595/86 to 89. Bachivalaya, Bangalore, 11th Oct. 1956.

To

Shri S.C. Sindhur, M.L.A.
~~Hangal Dist Dharwar~~
Council Hall, Bombay

Sub: Investigation of Dam across the river Varda near Banwasi in Sirsi taluka of Kanara district

Sir,

I am directed to refer to your letter dt. the 12 5 56 on the subject mentioned above, and to state that a scheme estimated to cost about Rs. 12 crores envisaging the construction of a dam across the Varda river at Kadasuru in Shimoga district of Mysore State to impound 20,000 mcft of water and with two canals to command about 1.46 lakhs of acres in the Mysore and Bijapur States, was considered in the past but was dropped as it would submerge a large area about 37% of the land to be irrigated and would give a very low percentage

* dt. the 3-1-56 vide No. 595/3266/56

2. In view of the impending reorganisation of States and unification of Karnataka territories, in the larger Mysore State the scheme now suggested by you is kept pending for the future Mysore State to consider further after reorganisation.

DA. Nil

Yours faithfully
(A.S. Bhatt)

-2
25.8.56.

Copy forwarded to the S.E.K.D.C. for information with reference to his letter No. D.I 2 dt. the 4-8-56.

-2
-25-8-56.

13/8

Appendix F. G.—1]

SUBJECT Investigation of a Dam across River Vedavathi Near Banavasi in Sirsi Taluk, N. Kanara Dist

Diary No. of letter replied to .....

Mysore Government Secretariat.

( )

the 195 .

Date of issue.....

Signed by.....

List of enclosures .....

Copied by.....

Examined by .....

Section

File No.

Serial No.

No. P.W.D 37 SRS 57 dated 1st March 57

To

The CE MI(N), Munivabad.

Sir,

I am directed to forward herewith a copy of the letter No DI 2, dt 4/8/56 from the SE, ICIC, addressed to the CE. Circle) & Secy to Govt, P.W.D, B'bay, along with its enclosure on the above Subject, and to request you to offer your comments in the matter.

Yours faithfully,

for Secy to Govt

WD 0257—GPB—P.Z.S.—1,20,000—6-6-55

GOVERNMENT OF MYSORE

No.PWD 37 IRI 57

Mysore Government Secretariat,
Vidhanasoudha,
Bangalore, dated 23/5/ 1958.

From

The Secretary to Government,
Public Works Department, Bangalore.

To

The CE MJ (N)

Sir,

Sub: As on page 15/cf

Your attention is invited to the marginally noted communication.

PWD 37 IRI 57 dt 1.3.57

2. You are requested to furnish the reply thereto urgently.

Issued
23/5

Yours faithfully,

for Secretary to Govt. P.W.Department.

GOVERNMENT OF MYSORE

No.PWD 37 IRI 57

From

Mysore Government Secretariat,
Vidhanasoudha,
Bangalore, dated 23/5/ 1958.

The Secretary to Government,
Public Works Department, Bangalore.

To

The CE MI (N)

Sir,

Sub: As on page 15/cf

Your attention is invited to the marginally noted communi-
cation.

PWD 37 IRI 57 dt 1.3.57

2. You are requested to furnish the reply thereto urgently.

Issued
23/5

Yours faithfully,

for Secretary to Govt. P.W.Department.

GOVERNMENT OF MYSORE.

OFFICE OF THE CHIEF ENGINEER, PWD
MAJOR IRRIGATION NORTH, MUNIRABAD.

NO. 2046-47/TS Dated. 31-5-58

To

The Secretary to Government,
Public Works Department,
Bengalore.

Sub:- Investigation of Dam across River Varda near Banawasi in Sirsi Taluk of North-Kanara Dist.

Ref:- Your letter No. PWD 37 IRI 57 dt. 23-5-58.

Sir

I write to state that the investigation of the above scheme has been taken up by Superintending Engineer, KIC. Dharwar and he has been reminded to expedite the matter.

Yours faithfully,

for Chief Engineer, PWD,
Major Irrigation North,
Munirabad.

Copy to Superintending Engineer, PWD, KIC.Dharwar for information in continuation to this office letter No. W/255/57/705/TS dt. 9-12-57. The matter has been delayed unduly long. The project estimate and report may be submitted without further delay

YGR. 30/5.

II - Reminder

GOVERNMENT OF MYSORE.

2-1

No.PWD 37 IRI 57

Mysore Government Secretariat,
Vidhanasoudha,
Bangalore, dated 30-8-1958

From

The Secretary to Government,
Public Works Department, Bangalore.

To

The CE. MI(N)

Sir,

Your attention is invited to the marginally noted communications.

Ref: PWD 37 IRI 57 dt 1.3.57
PWD 37 IRI 57 dt 23.5.578

Sub: As on page 15/cf

2. You are requested to furnish the reply thereto immediately.

Yours faithfully,

O/C MCL 29/8/58

for Secretary to Government,
Public Works Department.

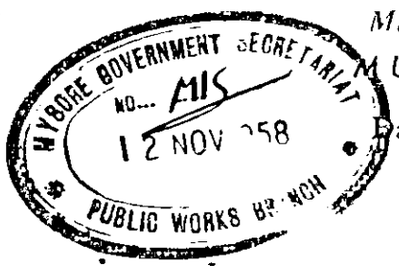
29/8/58

Issued
29
30/8

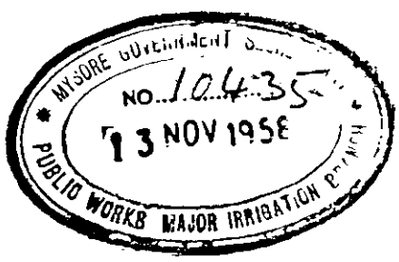
GOVERNMENT OF MYSORE

TELE { GRAM: "PROJECTS" / PHONE: }

Office of the Chief Engineer, P. W. D.,
Major Irrigation (NORTH)
MUNIRABAD (S. Rly.)



No 7340/3/TR Dated 8-11-1958



To,

The Secretary to Government,
Public Works Department,
Bangalore.

Mr. UBB

SUBJECT: Investigation of a Dam, across River Varda near Banawasi in Sirsi Taluk of North Kanara District.

Reference: Government letter No. PWD 37 IRI 57 dated 1st March 1957.

Sir,

A scheme for constructing a dam on the Varda river was investigated on topo sheet studies and a preliminary report was submitted to the Ex-Government of Bombay by the Superintending-Engineer, Special Investigation Circle, Dharwar. A copy of the Report along with the salient features of the scheme and a plan is herewith enclosed.

As the location of the dam at Kadasuru is within the territory of old Mysore state, the then Bombay Government kept the investigations of the project pending. The entire scheme lies within the New Mysore State.

The Superintending Engineer, Karnatak Irrigation Circle, has been directed to take up the investigations for getting up a most economical scheme for the utilisation of the Varda waters in both old Mysore and Bombay Karnatak areas. The surveys are taken up and a further report will be made when these are completed and estimates framed.

Yours faithfully,

7.11.58

for Chief Engineer, PWD,
Major Irrigation North,
Munirabad.

YGR. 7/11.

Refd and sent
7.11.58.

A short reconnoitary Report on an irrigation Scheme with a storage reservoir across Varda River.

....

The Varda valley offers fairly attractive features for an irrigation scheme, particularly for the growth of rice. Due to the flat bedfall of the river, a large storage of the order of -- 20,000 mcft. is feasible with a small height of Dam viz. 76ft. above river bed level and 100 ft. above foundations, the depth of founds below river bed being assumed (no trial pits of bore being taken). The site is by no means as attractive as in the case of Ghataprabha valley, but that is not a fair comparison at all; as Ghataprabha valley has exceptionally good features which no toher irrigation scheme in Bombay province possesses.

The very advantage which the river possesses (viz. its flat bed fall) however becomes a disadvantage so far as a canal is concerned as well as for lands submerged in the lake. To gain command of -- 1,46,000 acres the area of the land to be submerged is 37,000 acres. Out of these 37,000 acres, however, about 10,000 acres between F.S.L. (R.L. 1855) and the post monsoon water level (R.L. 1845) will be available for cultivation just after monsoon (i.e. after irrigation of the first crop of rice is over). The usual assumption that lands submerged are lost forever must however be cast away. For, these could be brought under crops immediately after the water level goes down, on the lines of "Pan-bud" (पान बुडी) lands along the banks of River Krishna (e.g. near Jamkhandi). It is true that these submerged lands cannot be cultivated for rice after water levels goes down as the rainfall has, by that time, stopped; but 'Jawar' or 'Maize' grown on these lands should give a bumper harvest.

Again due to the flat bed fall of the river, it is essential to keep the outlet sills for both canals (Right and Left) at a level much heigher than normal.

The river forms the border line between Bombay and Mysore for some length while another portions it crosses the border between them at several places and an irrigation scheme on this river is therefore possible only if both Governments agree. As, however, the Mysore state falls in the Indian Union, storage scheme on Varda were topographically studied irrespective of the territorial limits. Principal features of the scheme found to be promissing with a Dam near Kadasuru with a high canal bed level, are given in the accompanying Appendix No. 1. In this scheme, the proportion of submergence of lands in Bombay and Mysore is 1:3 while the benefit of irrigation is in the ratio of 2:1. This will show how essential it is to get the consent of Mysore Government for an irrigation scheme, before even preliminary surveys could be undertaken.

While supplies available from the river are ample, the area under command is limited due to the flat bed fall of the river. It is, therefore, proposed to irrigate two food crops per year (including rice and some follow-on light Rabi crop like gram or Maize). With such proposals, an irrigation scheme is quite feasible as will be seen from accompanying statement (Appendix No. 1) Past experience shows that whatever be the desire of Government, the demand from influential public is for cane. Figures have therefore, been worked out for a rice cane scheme also.

Lands in the area under command with an average rainfall of 25 inches to 40 inches (mostly in monsoon season) is quite suitable for rice crop. A successful crop (16 annas) can be assured every year if storage provided for water is sufficient for 3 or 4 waterings The scheme is proposed is very suitable for overcoming the food shortage, especially of rice. ~~A few detailed calculations about the storage needed and the basis of cost are given in appendix No. 2 (attached)~~ A blue print plan (scale 1" to 4 miles) showing the site of dam and areas likely to be affected (submerged) as well as the

PTO.

area getting advantage, is attached herewith for reference.

sd/- N.S. Joshi,
Superintending Engineer, PWD,
KIC.

" TRUE COPY ".

APPENDIX NO. I.

Principal features of the storage Reservoir across Varda River near Kadasuru.

S.NO.	Particulars.	Description with figures etc.
A.	I. Catchment area.	290 Sq. miles.
	2. Probable runoff with two shortages in 25 years.	20,000 Mcft.(taken from the report of gauging the river varada at Banavasi where catchment area 444 Sq.miles and runoff,29,400 Mcft.-T.P. No.30)
	3. River Bed.	R.L. 1779.0
	4. F.S.L.	R.L. 1855.0
	5. Length of dam.	5,300 ft.&2 gap filling.
	6. Outlet sill.	R.L.1840.0
	7. Maximum height of dam above foundation.	104 ft.
B.	1. Land submergence.	37,000 acres
	2. Mysore territory -do-	27,000 "
	3. Bombay territory -do-	10,000 "
	4. Proportion of submerged lands Bombay/Mysore.	1/3 (ratio)
C.	1. Area under command.	1,45,850 acres.
	2. Left Bank Canal(150 miles)	72,400 "
	(a) Bombay territory.	48,400 "
	(b) Mysore territory.	24,000 "
	3. Right Bank Canal(140 miles)	73,450 "
	(a) Bombay territory.	53,000 "
	(b) Mysore territory.	20,450 "
	4. Proportion of A.U.C. Bombay/Mysore(command)	2:1 (ratio)
	5. Culturable area(about 75%)	1,00,000 acres.
	6. Percentage of submerged area to irrigable area.	37%
D.	Cost of complete scheme.	Rs. 1,166 lakhs.
	1. Works. ...	96 "
	2. Compensation. ...	200 "
	3. Canals. ...	870 "
E.	Cost of storage per Mcft.	Rs. 1,480
F.	Area under different crops.	1,00,000 acres.

		With two crops per year. Rice-gram	With one crop per year. Rice-cane.
1.	Rice.	1,00,000 acres	80,000 acres
2.	Gram.	1,00,000 acres	-
3.	Cane.	-	8,000 "
4.	Gross Revenue.	Rs. 14.0 lakhs.	Rs. 14.4 lakhs.

5.	Net Revenue.	Rs. 10.0 lakhs.	Rs. 11.6 lakhs.
6.	% return on the scheme.	0.86 %	1.0 %
7.	Additional food production.	66,667 tons Gram.	36,000 Tons Gulf 32,000 Tons Gram.
8.	Capital per ton	Rs. 1750 grain only.	Rs.1750 All food. Rs.3700 Grain only.

sd/-
Superintending Engineer, PWD,
Karnatak Irrigation Circle.

" TRUE COPY ".

YGR.
7-11-58

GOVERNMENT OF MYSORE.

No.PWD 37 TRS 59

Mysore Government Secretariat,
Vidhanasoudha,
Bangalore, dated 11th March 1959

From

The Secretary to Government,
Public Works Department, Bangalore.

To The C.E. (W)

Sir,

Your attention is invited to the marginally noted communications.

Ref: ~~PWD~~ Govt. letter of even No dated 1.3.57, 23.5.58 and 30.8.58.

Sub: your letter No 7340/3/TA2 on 8.11.58.

2. You are requested to furnish the reply thereto immediately.

~~#5 on page 15/c~~

Yours faithfully,

10/3/59

for Secretary to Government,
Public Works Department.

Issued
28/11/3

C/C 15 10/3

F. No. 45] GOVERNMENT OF MYSORE

OFFICE OF

No. W/325/57/2863/TA3
Encls.

THE CHIEF ENGINEER, PWD,
IRRIGATION PROJECTS. MUNIRABAD.

To

Date 21-3-59

The Secretary to Government,
Public Works Department, Bangalore.

Sir

Mr. USB

Sub:- Investigation of Dam across River Verdha near Banwasi in Srisi taluk of North Kanara District.

Ref:- Your reminder No. PWD 37 IRI 57 dt. 11-3-59.

I write to state that the report called for is still awaited from Superintending Engineer, PWD, Karnatak Irrigation Circle, Dharwar and will be forwarded to you soon after receipt from him. He has been reminded again.

MYSORE GOVERNMENT SECRETARIAT
23 MAR 1959
PUBLIC WORKS MAJOR IRRIGATION
NO. 329
YGR. 19/3

Yours faithfully,

20.3.59

for Chief Engineer, PWD,
Irrigation Projects.

mil

20.3.59

35

Mysore Govt. Secretariat,
Vidhana Soudha,
Bangalore, Dt. 26/6/59

D.O.No.P.W.D 37 IRI.57

Dear Sir,

Sub: As on page 15/C.F.

I am desired to invite your attention to this Office letter of even No./~~No.~~ dated 4.3.57 and subsequent reminders dated 23.5.58, 30.8.58, 11.3.59 and your letter No. W/325/57/2863/FA-3 dt. 21.3.59 on the above subject and to request you kindly to expedite reply thereto immediately/~~by return of post.~~

Yours sincerely,

C.T.V.
Sd/- 26/6.

To

Shri. R.L. Rajan, B.E.,
C.E.P. Nuniraband.

b
27/6.
~~26/6/59~~

Despatched in No. P.W.D.....
Dated.....26/6/59.....

C. F. No. 45] GOVERNMENT OF MYSORE

Telegram / ph.

No. 5992/2/TA3

Encls.

Office of the Chief Engineer, P.W.D.
~~OFFICE OF~~ IRRIGATION PROJECTS.
MUNIRABAD (S. Rly.)

Date 13-7-57

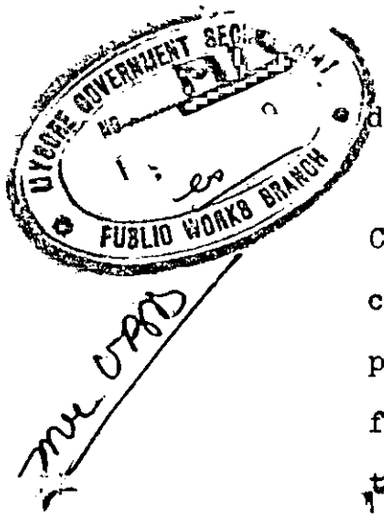
To

The Secretary to Government,
Public Works Department, Bangalore.

Sir,

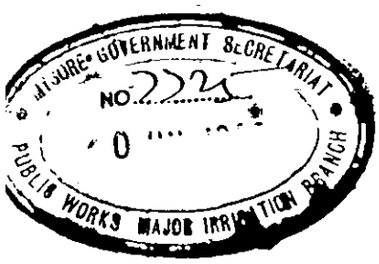
Sub:- Investigation of a Dam across River Varda.

Ref:- Your letter No. PWD 37 IRI 57 dt. 1-3-57.



In continuation of this office letter No.7340/3/TA2 dt. 8-11-56, I write to state as follows:-

The Superintending Engineer, Karnarak Irrigation-Circle, Dharwar was directed to investigate a most economical scheme for utilising the waters of Varda river. The possibility of constructing a series of low weirs in the flat valley of the river with regulators on either side to irrigate the lands that could be commanded was also considered.



The Superintending Engineer, has now submitted a detailed note on the investigations and preliminary topo sheet study of the entire topography of the river and has proposed a small storage on the tributary with a pick-up-weir on the river to irrigate an area of 20,000 acres on either flank of the river. The scheme is expected to cost Rs. 225 lakhs with a financial return of 3.64 %.

The Superintending Engineer, has been instructed to take up detailed surveys and investigations of the proposed project and submit the plans and project estimate. A further report will be submitted after the detailed investigations are over. A copy of the note of preliminary study of the project received from Superintending Engineer, Special Irrigation Investigation Dharwar is also enclosed.

Yours faithfully,
11/7/57
for Chief Engineer, PWD,
IRRIGATION PROJECTS.

Encl:- One note
& One plan.
YGR. 10/7.

BRIEF NOTE ON THE IRRIGTION SCHEME ON VARDA SCHEME.

****

The Verda River, which is one of the Major rivers of the Mysore State, rises in the eastern slope of the Western Ghats near Talguppa in Sagar Taluka of Shimoga District and flows in a north-easterly direction for about 120 miles before it joins the Tungabhadra River near Galagnath village in Dharwar District.

As the Varda river valley in very flat, practically over its entire length, any proposal of constructing a large storage reservoir will involve heavy submergence of rich,fertile lands on the banks of the river and will not be economically feasible. A scheme for constructing a storage reservoir near Kadasur, with canals on both banks, to irrigate an area of about -- 1,00,000 acres, was worked out roughly, but it was found that an area of about 37,000 acres of rich lands would be submerged and the project would cost about Rs. 1,166 lakhs. Hence this proposal was dropped.

Subsequently reconnoitary surveys were carried out to study the feasibility of constructing a series of weirs at intervals of 2 to 4 miles apart along the course of the river, to divert the river flow for irrigating the lands on both banks. Inspection of the river course revealed that there are no good sites for weirs from kadasur to Adur;also the verda river valley from -- Kadasur to Adur receives adequate rainfall. It is seen that there is a fairly good site for a weir upstream of the Sangur Causeway.

It is, therefore,tentatively proposed(to be confirmed after detailed surveys and investigations) to construct a pick-up-weir about 1300ft. long and having maximum height of about 22 feet with top at R.L.1750(approx.) near Shigihalli-1½miles upstream of the Sangur Causeway -and to have canals on both banks of the River taking off from the weir at about R.L.1745.00 for irrigating the area on both banks upto the confluence of varda river with the Tungabhadra river. The Right and Left bank Canals having lengths of about 51 and 55 miles respectively will

Con.Page 2.)

will command approximately 15,500 and 13,200 acres respectively. Assuming @ 70% of the gross command as the irrigated area it would be roughly. $\frac{70}{100} \times 28,700 = 20,090$ acres say 20,000 acres about 20,000 acres.

Crop pattern proposed. It is ascertained from local enquires that the people are keen in growing sugarcane and paddy if irrigation facilities are made available to them. It is learnt that the proposal to set up a sugarcane factory at Hangal is held up for want of adequate water for growing sugarcane. Keeping in view the above factors and to make the best use of the available water flow of the River, the following crop pattern is proposed.

Total irrigated area.	20,000 acres.
Paddy	15,000 "
Sugarcane	5,000 "
Light follow-on crops.	15,000 "

Water requirements and availability of water flow in the river:- The requirement of water for irrigation is calculated on the assumption that the duty for paddy and sugarcane would be 50 acres per cusec, and that for the light follow-on crops would be 150 acres per cusec at canal head.

From 15th June to 14th October.

Discharge required in the canals $= \frac{15,000}{50} + \frac{5,000}{50}$
$= 300 + 100 = 400$ cusecs.

From 15th October to 14th February.

Dischrage required in the canals.$= \frac{5,000}{50} + \frac{15000}{150}$ cusecs.
$= 100 + 100 = 200$ Cusecs.

From 15th February to 14th June.

Discharge required in the canals $= \frac{5,000}{50} = 100$ cusecs.

Thus it is seen that the discharge required in the canals, seasonwise are -

Khariff season.	400 cusecs.
Rabi season.	200 "
Hot weather season.	100 "

Discharge available in the Varda river:- The data of daily discharge of the Varda River gauged at Honkan, about 17 miles upstream of the proposed weir site is available from the year 1951 to 1957. From the

From the available data, a statement showing the average daily discharges available in the river during each fortnight of the year for 7 years from 1951 to 1957 and the assumed dependable daily discharge during each fortnights of the year is prepared.(Please vide statement No.1 enclosed) It will be seen from the statement that, on an average, there will be no flow in the river from Janurary to May. In the months of July and August, the discharge available is more than 2,000 cusecs, the river being in floods. From September the river flow starts dwindling down from 1,000 cusecs in the first fortnight of September to about 80 cusecs in the month of Decr. It is, therefore, evident that construction of a storage reservoir upstream of the weir site to impound adequate storage for letting down into the river during the periods of low discharges in the river, for supplmenting the canal discharges is absolutely necessary. Hence, storage of approximately 3600 Mcft. will be necessary (please vide statement No.II enclosed.)

It is therefore proposed to construct a storage reservoir of about 3600 M.Cft. capacity across Hadaganhalla, a tributary of Varda River near Chikkallugudu village of Sorab Taluka in Shimoga District. Water from this reservoir can be drawn as and when necessary for supplementing the supplies to the canals, taking off from the proposed weir near Shigihalli.

Present proposal:- The scheme, as envisaged now, with the proposed crop pattern, consists of-

a) Construction of a storage reservoir of about 3600Mcft.across Hadaganahalla near Chikkallugudu.

b) Construction of a pick-up-weir on Varda River near Shigihalli

c) Construction of Right and Left Bank Bank Canals taking off from the weir to irrigate the lands coming under their command Rough technical details in respect of each of the above component parts based on the topo-sheet studies are given below:-

a) Storage dam across Hadaganhalla near Chikkallugudu:-

Catchment area. 70 Sq. miles.

Assuming an average monsoon rainfall of 60" and taking the catchment as an average one, the yield as per strange's Table will be 70 x 62.73 = 4391 M.Cft.

But it is proposed to store only 3600 M.Cft.

cont: page 4.

F.S.L. of the storage reservoir.	R.L. 1818.00
Top of dam.	R.L. 1832.00
Deepest Nalla bed level.	R.L. 1765.00
Max. ht. of dam.	67 feet.
Length of Dam(aprox.)	6600 feet.
Lands under submergence..	4100 acres. (mostly forest lands.)
Villages likely to be submerged:	4 Nos.

1) Suntrahalli.
2) Mangarsikop.
3) Devasa.
4) Chikkallugudu.

b) Pick-up-weir across varda river near Shigihalli.

Top of the weir.	R.L. 1750.00
Length of the ~~wir.~~ weir	1300 ft.
Lowest river bed level.	R.L. 1728.00
Max.ht. of the ~~weir~~.	22 ft.
Area under submergence.	1152 acres.
Villages likely to be affected.	4 Nos.

1) Tumarikop.
2) Chikkahullal.
3) Shigihalli.
4) Bidargadi.

C) Canals taking off from the weir.

Left Bank Canal.

Length.	53 Miles.
Gross command.	13,200 acres.
Irrigated area.	9,240 acres.
Bed fall.	1ft/mile
Capacity at head.	200 cusecs.

Right bank canal.

Length	51 miles.
Gross command.	15,500 acres.
Irrigated area.	10,760 acres.
Bed fall.	1 ft./mile
Capacity at head.	200 cusecs.

Irrigation:- Total area coming under irrigation will be about 20,000 acres and crops proposed are.

i)	paddy.	15,000 acres.
ii)	Sugarcane.	5,000 "
iii)	Light ~~f~~follow-on crops.	15,000 "

Financial Aspects of the Scheme:- The rough costs of the various component parts of the scheme are approximately worked out as below:-

a)	Storage dam at Chikkallugudu.	Rs. 100 lakhs.
b)	Pick-up-weir near Shigihalli.	Rs. 15 "
c)	Left and Right Bank canals of 53&51 miles length respectively.	Rs. 110 "
	Tota. cost.	Rs. 225 Lakhs.

Revenue:

Water rates.

Paddy 15,000 acres at Rs.15/- per acre.	Rs. 2.25 lakhs.
Sugarcane 5,000 acres at Rs. 120/- per acre.	Rs. 6.00 "
Light follow on crops 15,000 acres at Rs.3/- per acre.	Rs. 0.45 "
Total.	Rs. 8.70 Lakhs.
Deduct working expenses at Rs.2.5 per acre. irrigated.	Rs. 0.50 "
Net Revenue.	Rs. 8.20 "

Percentage Return.

Total cost of the scheme.	Rs. 225 lakhs.
Net Revenue.	Rs. 8.20 "
Percentage return. $\frac{8.20}{225} \times 100$ =	~~3.6%~~ 3.64%

Conclusion:- From the above, it appears that the scheme is an attractive one. Though the submergence below the storage - reservoir and pick-up-weir is of the order of about 5,250 acres, most of the submergence, especially below the reservoir consists of forest lands. In addition the scheme aims at harnessing the waters of the varda river to the maximum possible extent.

Hence it is recommended that the scheme should be taken up for investigation immediately so that the scheme could be prepared & kept ready for inclusion in the Third Five Year Plan.

Sd/-
Executive Engineer, PWD,
Irrigation Projects Dvn. Dharwar.

" TRUE Copy "

Sm Rao
11-9-58

VARDA IRRIGATION SCHEME.

STATEMENT NO. II.

Statement showing the dependable discharges available in the River discharges required for the canal at the weir site and the quantity of Supplimentary Storage required to be stored in the storage Reservoir at Chikkallagudu.

Month and period.	Dependable discharges in the river in Cusecs.	Discharge required for canal in Cusecs.	Deficit discharge in Cusecs.	Supplimentary storage required in M.Cft.	Remarks.
1	2	3	4	5	6
June					
1 to 15	25	100	75	97	
16 to 30	500	400	--	--	
July.					
1 to 15	1500	400	--	--	
16 to 31	2000	400	--	--	
August.					
1 to 15	2000	400	--	--	
16 to 31	2000	400	--	--	
September.					
1 to 15	1000	400	--	--	
16 to 30	600	400	--	--	
October.					
1 to 15	600	400	--	--	
16 to 31	400	200	--	--	
November.					
1 to 15	600	400	--	--	
16 to 30	100	200	100	130	
December.	80	200	120	321	
January.	--	200	200	536	
February.					
1 to 15	--	200	200	259	
16 to 28	--	100	100	112	
March.	--	100	100	268	
April.	--	100	100	259	
May.	--	100	100	259	
			Total.	2241	

Total atorage required in M.cft. 2241

PTO.

Total storage required in M.cft.		2241.
Add 20% of losses in transit		448
	Total.	2689
Add 20% for evaporation losses.		538
	Total.	3227
Add 10% for silting capacity.		323
	Total.	3550 M.Cft.
	or say.	3600 M.Cft.

sd/-
Executive Engineer,
Irrigation Projecte Division
Dharwar.

TRUE COPY.

11-7-55

VARDA IRRIGATION SCHEME.
STATEMENT NO. I

Statement showing the average discharges available in the Varda River at Honkan during the fortnight and the assumed dependable discharge during the fortnight.

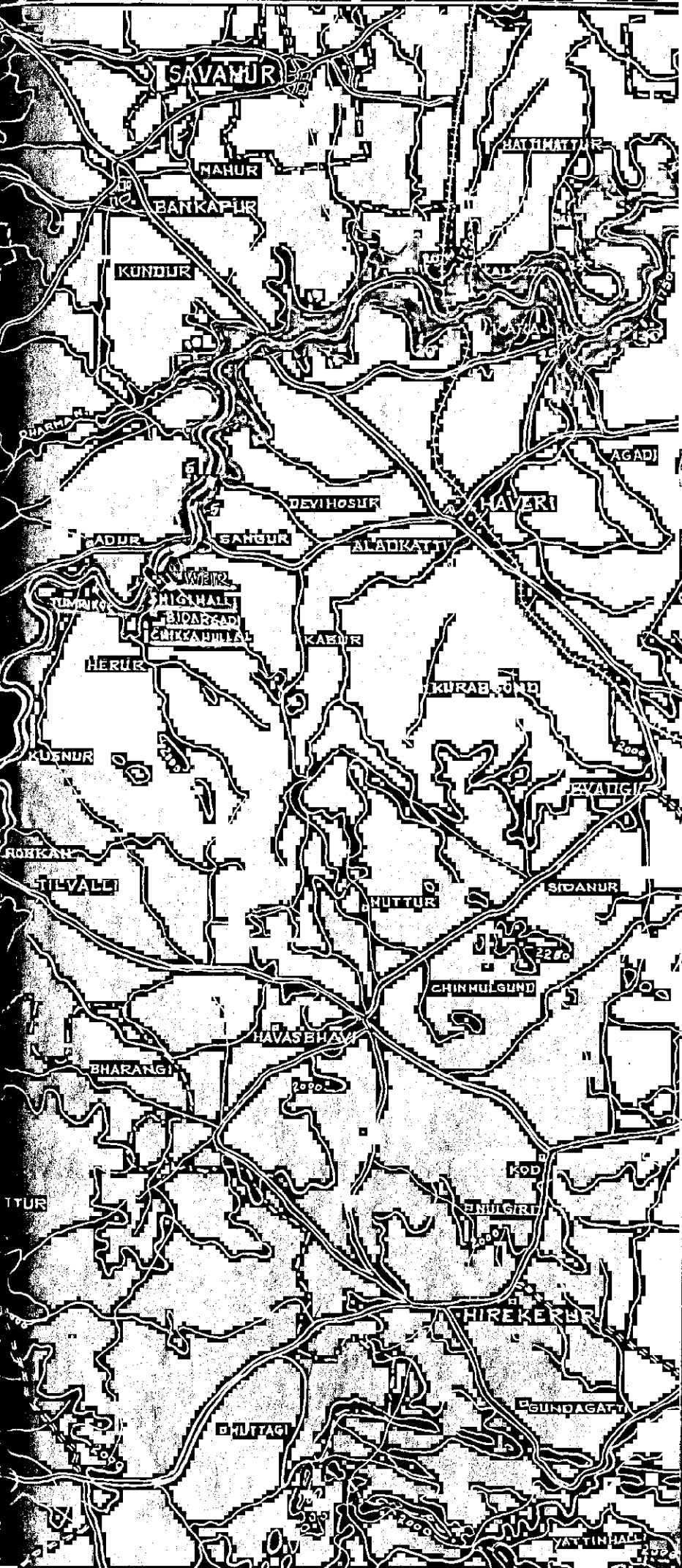
Months.	Y E A R S. 1951	1952	1953	1954	1955	1956	1957	Assumed dependable discharges.	Remarks.
	Cusecs.	Cusecs.	Cusecs	Cusecs.	Cusecs.	Cusecs.	Cusecs.	Cusecs.	
June.									
1st to 15th.	-	10	3	25	2	400	-	25	
16th to 30th.	-	400	1500	400	50	500	1000	500	
JULY.									
1st to 15th.	500	500	21700	7300	350	22000	9500	3500	
16th to 31st.	2000	2000	1500	2000	150	2000	2000	2000	
AUGUST.									
1st to 15th.	2000	2000	2000	2000	200	2000	2000	2000	
16th to 31st.	1500	2000	2000	2000	200	2000	2000	2000	
SEPTEMBER.									
1st to 15th.	250	300	1000	800	590	--	2200	1000	
16th to 30th.	100	100	350	700	200	--	600	600	
OCTOBER.									
1st to 15th.	600	600	400	350	20	--	800	600	
16th to 31st.	150	300	600	250	58	--	800	400	
NOVEMBER.									

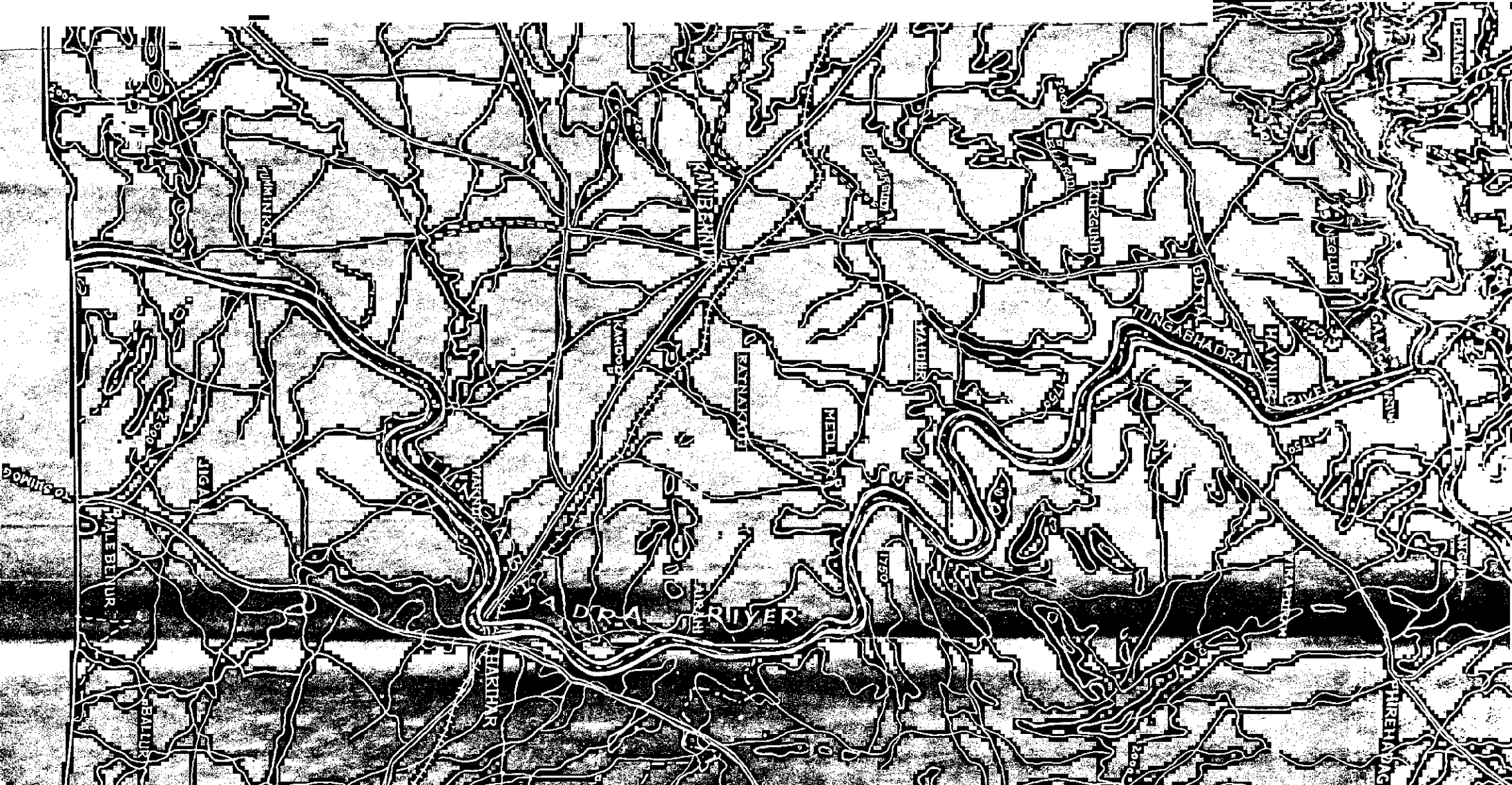
1st to 15th.	-	100	300	80	1000	--	1000	300
16th to 31st.	-	100	80	20	400	--	400	100
DECEMBER.	-	80	60	10	100	--	100	80
JANUARY.	-	Nil.	30	40	2	56	--	Nil
FEBRUARY.	-	Nil.	15	15	15	20	--	Nil
MARCH.	-	Nil.	8	10	5	10	--	Nil
APRIL.	-	Nil	9	9	3	7	--	Nil
MAY.	-	20	10	15	20	20	--	Nil

Sd/-
(V.D.Kulkarni.),
Executive Engineer,
Irrigation Projects, Dn., Dharwar.

"TRUE COPY"

11.6.57.


SAVANUR
BANKAPUR
KUNDUR
DEVIHOSUR
HAVERI
AGADI
SANGUR
ALADKATTI
WEIR
HIGHALL
BIDARGAD
CHIKKAHULLAL
KABBUR
HERUR
KURABAGOND
KUDNUR
HORKAN
TILVALLI
NUTTUR
SIDANUR
CHINMULGUND
HAVASBHAVI
BHARANGI
HIREKERUR
GUNDAGATTI
YATTINHALLI


TUNGABHADRA
RIVER
HARIHAR
JIGA
MALEBENUR
BALLIG
HIREHADAG

55

Mysore Govt. Secretariat,
Vidhana Soudha,
Bangalore, Dt. 20/9/59

D.O.No.PWD 37 IRI 59

Dear Sir,

Sub: As on page 1 S/CE

I am desired to invite your attention to this Office letter of even No./~~No.~~ dated 7.3.59 and subsequent reminders dated 23.5.58, 20.8.58, 11.3.59, 26.6.59 and your letter No. 5992/2/TA-3 dt. 13.7.59 on the above subject and to request you kindly to expedite ~~early~~ ~~thereto immediately by return of post.~~ submission of the plans and estimates of the project urgently.

Yours sincerely,

Dispatched in No. PWD
30/5/59
Dated

Shri. R.L. Raju, BSc., EO 30/9
EE. I.P. Nanjanagud.

Copy to SE. Spl. Irrn Investigation Circle, Mysore to take expeditious action, and submit the plans and estimates of the scheme through the E.E.I.P. urgently. EO
for Secy PWD

M. G. S. App. F VI—G. 2]

SUBJECT Investigation of a dam across the River Varada - Engineer Officer Shri Sindhanur MLA

Diary No. of letter replied to.....

Mysore Government Secretariat

( )

the 195 .

Date of issue.....195 .

Signed by.....

Section

Serial No.

File No. PWD 371 RIS 57

Proceedings of the ~~Government of~~ Mysore

~~Read~~ To,

The Ch. Off

Municipal

~~Sir~~,

With reference

~~Order thereon, No.~~ To his adv

I am directed -

Engineer for Kind to

investigate

forward a/ Report

Preliminary Report on

preliminary investigation of the

his Varada Project

~~as it is for~~ under

should to have been

which has been conducted under

May this be—

(i) printed?
(ii) treated as a Standing Order?
(iii) published in the Gazette, English Part?
(iv) translated?
(v) placed at the disposal of the Press?
(vi) published in the Gazette, Kannada Part?

investigated forwarding preliminary

back

Govt. parish Council

Engrs

Chf S & Comm

CHB PWD

24/10

Copy to Mr. S. E.

Virgn. Investigation Circle

Dharwar for necessary

action

Received in N. E. 37 IRIS

Dated 12/11/59

List of Enclosures.

Engr

Chf S & Comm

CHB pwd

24/10 26/10

Copied by

Examined by

WD 0269—GPB—P.Z.S.—1,00,000—23-2-56

57

No. M.I.I.

Office of the Superintending Engineer,
Irrigation Investigation Circle,

Dharwar,

20 NOV 1959

To

The Secretary to the Govt.of Mysore,
Public Works Department, Bangalore.

MYSORE GOVERNMENT SECRETARIAT
PUBLIC WORKS BRANCH

Sub:- Investigations of a Dam across the River Varada - request from Sri.Sindhur, M.L.A.

Ref:- Your letter No. PWD 37 IRI 57 dt. 12-11-59 addressed to the Chief Engineer, Irrigation Projects, Munirabad, and copied to this office.

Sir,

I am herewith enclosing a brief note on the preliminary investigations carried out for an irrigation scheme across Varada River. As per the instructions of Chief Engineer, Projects, Munirabad, contained in his letter No.5545/TA3 dated 25-6-1959 (copy enclosed for ready reference) detailed investigations are taken up by the Executive Engineer, Major Investigation Projects Division, Dharwar, and two parties are working on it.

All efforts are being made to complete the investigations early of the Varada Scheme and also of Madag Masur Scheme.

MYSORE GOVERNMENT SECRETARIAT
NO. 11768
25 NOV
PUBLIC WORKS MAJOR IRRIGATION BRANCH

Yours faithfully,

19.XI.59

Superintending Engineer, I.I.C.

Copy submitted to the Chief Engineer, Irrigation Projects, Munirabad, for information.

—

Copy forwarded to the Ex.Engr., Major I.P.Division, Dharwar. He should see that the surveys are completed early and the estimates are submitted for sanction.

—

BR/18-11-59

BRIEF NOTE ON THE IRRIGATION SCHEME ON VARDA RIVER.

The Varda River, which is one of the Major rivers of the Mysore State, rises in the eastern slope of the Western Ghats near Talguppa in Sagar Taluka of Shimoga District and flows in a north-easterly direction for about 120 miles before it joins the Tungabhadra River near Galagnath village in Dharwar District.

As the Varda River valley is very flat, practically over its entire length, any proposal of constructing a large storage reservoir will involve heavy submergence of rich fertile lands on the banks of the river and will not be economically feasible. A scheme for constructing a storage reservoir near Kadasur with canals on both banks to irrigate an area of about 1,00,000 acres was worked out roughly; but it was found that an area of about 37,000 acres of rich lands would be submerged and the project would cost about Rs.1,166 lakhs. Hence this proposal was dropped.

Subsequently reconnoitary surveys were carried out to study the feasibility of constructing a series of weirs at intervals of 2 to 4 miles apart along the course of the river, to divert the river flow for irrigating the lands on both banks. Inspection of the river course revealed that there are no good sites for weirs from Kadasur to Adur also the Varda River Valley from Kadasur to Adur receives adequate rainfall. It is seen that there is a fairly good site for a weir upstream of the Sangur Causeway.

It is, therefore, tentatively proposed (to be confirmed after detailed surveys and investigations) to construct a pick-up-weir about 1300 ft. long and having maximum height of about 22 ft. with top at R.L.1750 (approx.) near Shigihalli - 1½ miles upstream of the Sangur Causeway - and to have canals on both banks of the River taking off from the weir at about R.L.1745.00 for irrigating the area on both banks upto the confluence of the Varda River with the Tungabhadra River. The right and left Bank Canals having lengths of about 51 and 53 miles respectively will command approxmiately 15,500 and 13,200 acres respectively. Assuming 70% of the gross command as the irrigated area it would be roughly $\frac{70}{100} \times 28,700 = 20,090$ acres or say 20,000 acres.

Crop pattern proposed: It is ascertained from local enquiries that the people are keen in growing sugarcane and paddy if irrigation facilities are made available to them. It is learnt that the proposal to set up a sugarcane factory at Hangal is held up for want of adequate water for growing sugarcane. Keeping in view the above factors and to make the best use of the available water flow of the River, the following crop pattern is proposed:

p.t.o.

Total irrigated area:	20,000 acres.
Paddy	15,000 acres.
Sugarcane	5,000 acres.
Light follow-on crops	15,000 acres.

Water requirements & availability of water flow in the river: The requirement of water for irrigation is calculated on the assumption that the duty for paddy and sugarcane would be 50 acres per cusec, and that for the light follow-on crops would be 150 acres per cusec at canal head.

From 15th June to 14thOctober.

Discharge required in the canals = $\frac{15,000}{50} + \frac{5,000}{50}$

= 300 + 100 = 400 cusecs.

From 15th October to 14th February.

Discharge required in the canals = $\frac{5,000}{50} + \frac{15,000}{150}$

= 100 + 100 = 200 cusecs.

From 15th February to 14th June.

Discharged required in the canals = $\frac{5,000}{50}$ = 100 cusecs.

Thus it is seen that the discharge required in the canals, seasonwise are -

Kharif season	400 cusecs
Rabi season	200 cusecs
Hot weather season	100 cusecs.

Discharge available in the Varda River: The data of daily discharges of the Varda River gauged at Honkan, about 17 miles upstream of the proposed weir site is available from the year 1951 to 1957. From the available data, a statement showing the average daily discharge available in the river during each fortnight of the year for 7 years from 1951 to 1957 and the assumed dependable daily discharge during each fortnight of the year is prepared. (Please vide statement No.1 enclosed). It will be seen from the statement that, on an average, there will be no flow in the river from January to May. In the months of July and August the discharge available is more than 2,000 cusecs, the river being in floods. From September the river flow starts dwindling down from 1,000 cusecs in the first fortnight of September to about 80 cusecs in the month of Decr. It is, therefore, avident that construction of a storage reservoir upstream of the weir site to impound adequate storage for letting down into the river during the periods of low discharges in the river, for supplementing the canal discharges is absolutely necessary. Hence, storage of approximately 3600 M.cft. will be necessary (please vide statement No.II enclosed).

It is, therefore proposed to construct a storage reservoir of about 3600 M.cft. capacity across Hadaganhalla, a tributary of Varda River

near...

near Chikkallugudda village of Sorab Taluka in Shimoga District. Water from this reservoir can be drawn as and when necessary for supplementing the supplies to the canals, taking off from the proposed weir near Shigihalli.

Present proposal:- The Scheme, as envisaged now, with the proposed crop pattern consists of -

a) Construction of a storage reservoir of about 3600 M.cft. across Hadaganhalla near Chikkallugudu,

b) Construction of a pick-up-weir on Varda River near Shigihalli,

c) Construction of Right and Left Bank Canals taking off from the weir to irrigate the lands coming under their command. Rough technical details in respect of each of the above component parts based on the topo-sheet studies are given below:

a) Storage dam across Hadaganhalla near Chikkallugudu:

Catchment area 70 sq. miles.

Assuming an average monsoon rainfall of 60" and taking the catchment as an average one, the yield as per Strange's Table will be -

70 x 62.73 = 4391 M.cft.

But it is proposed to store only 3600 M.cft.

F.S.L. of the storage reservoir	R.L. 1818.00
Top of Dam.	R.L. 1832.00
Deepest Nalla bed level	R.L. 1765.00
Max. height of Dam.	67 feet.
Length of dam (approx.)	6600 feet.
Lands under submergence	4100 acres (mostly forest lands).
Villages likely to be submerged:	4 Nos.

1) Suntranalli
2) Mangarsikop
3) Devasa
4) Chikkallugudu

b) Pick-up-weir across Varda River near Shigihalli.

Top of the weir	R.L. 1750.00
Length of the weir	1300 feet.
Lowest river bed level.	R.L. 1728.00
Maximum height of the weir.	22 ft.
Area under submergence	1152 acres.
Villages likely to be affected:	4 Nos.

1) Tumarikop
2) Chikkahullal
3) Snigihalli,
4) Bidargadi

Canals taking off from the weir.

Left Bank Canal.....

Hence it is recommended that the scheme should be taken up for investigation immediately so that the scheme could be prepared and kept ready for inclusion in the Third Five Year Plan.

Sd/

Executive Engineer,
Irrigation Projects Dn.Dharwar.

"True copy"

ysv.19.11.5[illegible]

VARDA IRRIGATION SCHEME.

Statement No.II.

Statement showing the dependable discharges available in the River, discharges required for the canal at the weir site and the quantity of supplementary storage required to be stored in the storage Reservoir at Chikkallugudde.

Month and Period.	Dependable discharges in the River(in Cusecs)	Discharge required for canal (in cusecs)	Deficit Discharge in cusecs.	Supplementary storage required in Mcft.	Remarks.
1	2	3	4	5	6
JUNE					
1st to 15th	25	100	75	97	
16th to 30th	500	400	-	-	
JULY					
1st to 15th	3500	400	-	-	
16th to 31st	2000	400	-	-	
AUGUST					
1st to 15th	2000	400	-	-	
16th to 31st	2000	400	-	-	
SEPTEMBER					
1st to 15th	1000	400	-	-	
16th to 30th	600	400	-	-	
OCTOBER					
1st to 15th	600	400	-	-	
16th to 31st	400	200	-	-	
NOVEMBER					
1st to 15th	600	400	-	-	
16th to 30th	100	200	100	130	
DECEMBER	80	200	120	321	
JANUARY	-	200	200	536	
FEBRUARY					
1st to 15th	-	200	200	259	
16th to 28th	-	100	100	112	
MARCH	-	100	100	268	
APRIL	-	100	100	259	
MAY	-	100	100	259	
	Total storage required in M.cft			2241	
	Add 20% for losses in transit			448	
			Total	2689	
	Add 20% for evaporation losses			538	
			Total	3227	
	Add 10% for silting capacity			323	
			Total	3550 M.cft.	
			Or say	3600 M.cft.	

Sd/
Ex.Engr.,I.P.Dn.Dharwar.

"True copy"

GOVERNMENT OF MYSORE

No.PWD 37 IRI 57

Mysore Government Secretariat,
Vidhana Soudha,
Bangalore, dated, 1960.

From
The Secretary to Government,
Public Works Department, Bangalore.

To
The CE IP Mysore.

Sub:- Investigation of a dam across River Varada - request from Shri Sindhanoor MLA

Sir,

I am directed to invite a reference to the marginally noted communication/s and to request you kindly to furnish the report, therein referred to, urgently.

Ref: PWD 37 IRI 57 Dt 12.11.59

~~Your letter No MII 30159~~ Despatched in No. P.W. Dated 14/5/60 Or

Yours faithfully,

14/5/60.

for Secretary to Government
Public Works Department.

Copy to SE Irrigation Investigation circle Dharwar ~~Your letter No MII 30159 Dt 12.11.59~~ PWD 37 IRI 57

GOVERNMENT OF MYSORE

No. 37 IRI 57

MYSORE GOVERNMENT SECRETARIAT.
VIDHANA SOUDHA,
Dated, Bangalore, 16th July 1960.

FROM

Secretary to the Government of Mysore,
Public Works Department, Bangalore.

To The Chief Engineer,
Irrigation Projects, Munirabad.

Sir,

Sub:-Investigation of a dam across river Varada - request from Shri.Sindhnoor, M.L.A.

I am directed to invite a reference to the marginally noted communication and to request you kindly to furnish the report, therein referred to, urgently.

PWD 37 IRI 57
Dt.12-11-1959.

Yours faithfully,

Sd/-

for Secretary to Government,
Public WorksDepartment.

Copy to Superintending Engineer, Irrigation Investigation Circle, Dharwar in continuation of your letter No.M 11/20/11/59.

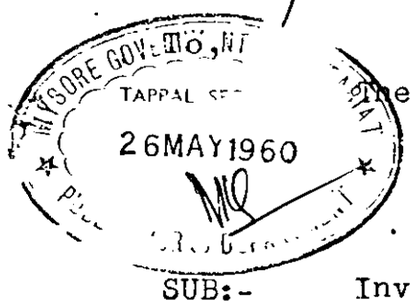
for Secy. to Govt. PWD. 14/5/60.

GOVERNMENT OF MYSORE.

Tele { gram:"PROJECTS
phone '

Office of the Chief Engineer,PWD.,
IRRIGATION PROJECTS,
MUNIRABAD, (S.Rly).
Dated.24.5..... 1960.

No W/325/57/1054/T-A-3
Encls;



The Secretary to Government,
Public Works Department,
Bangalore.

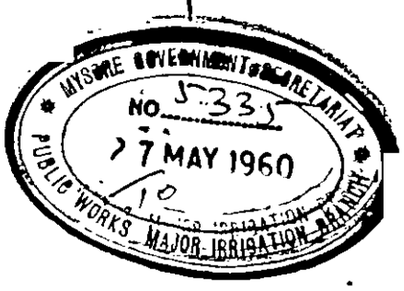
SUB:- Investigation of a dam across river Varda- request from Sri. Sindhnoor, M.L.A.

Ref:- Government's letter No. 37 IRI 57 dated 16-5-1960.

....

Sir,

I am to invite your kind reference to the Superintending-Engineer, Irrigation Investigation Circle, Dharwar's letter No.M.I.1 11768 dated 20-11-59 addressed to Government and copy endorsed to this office, where in a brief note on the preliminary investigations carried out for the above scheme has already been furnished by him. The officer is ~~being~~ requested to complete the detailed investigations immediately and submit the plans and estimates on priority basis. A report will be made to Government soon after the receipt of the same.



Yours faithfully,

for Chief Engineer, PWD
Irrigation Projects,
Munirabad.

Submitted for perusal

GOVERNMENT OF MYSORE.

No.PWD 37 IRI 57.

Mysore Government Secretariat,
Vidhana Soudha,
Bangalore, Dated: '60.

From

The Secretary to Government,
Public Works Department, Bangalore.

To

Ch I P M Bard

Sir,

Sub:- Investigation of a Dam across Arkavathy river valley - Request from Sri Bandhu M.L.A.

I am directed to invite a reference to the marginally* noted communication/s and to request you kindly to furnish the report, therein referred to, urgently.

Ref:- PWD 37 IRI 57 Dt 16.5.60
Your letter No. W/325/57/1054/113 Dt 24-5-60.

Yours faithfully,

6/8/60

for Secretary to Government,
Public Works Department.

Copy to Sri H C Dasappa, M.L.A. Chamarajpet, Bangalore City for information in connection with his letter No. ... Dt 16-5-60.

Despatched to P.W.D. Dated 6/8/60

P./14-6-60
500 C-each.

GOVERNMENT OF MYSORE

No.PWD 37 DRS 57

Mysore Government Secretariat,
Vidhana Soudha,
Bangalore, dated

From

The Secretary to Government,
Public Works Dept., Bangalore.

To

The CE & P Munirabad.

Sir,

Sub: Investigation of a dam across river Vanda - request from Sri Sindhanur MLA

I am directed to invite a reference to the marginally noted communication/s and to request you kindly to furnish the report, therein referred to, urgently.

PWD 37 DRS 59
5/8-8-60.

Despatched in No. PWD
Dated 1.10.60

Yours faithfully,

5/10/60

Secretary to Government,
Public Works Department.

8 4/10/60

GOVERNMENT OF MYSORE

No.PWD 37 IRI 57

Mysore Government Secretariat,
Vidhana Soudha,
Bangalore, dated

From

The Secretary to Government,
Public Works Dept., Bangalore.

To

The CE IP Mbad

Sir,

Sub: Investigation of a dam across River Vanda - Request from Sri Sindhanur MLA.

I am directed to invite a reference to the marginally noted communications/s and to request you kindly to furnish the report, therein referred to urgently.

Ref-no PWD 37 IRI 57 Dt 7-10-60.

Yours faithfully,

By Secretary to Government,
Public Works Department.

O/C
14T6

15/6/61.